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## PCT COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents  
United States Patent and Trademark  
Office  
Box PCT  
Washington, D.C.20231  
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

<b>Date of mailing</b> (day/month/year) 29 August 2000 (29.08.00)	
<b>International application No.</b> PCT/AU99/01164	<b>Applicant's or agent's file reference</b> 2244754/LKA
<b>International filing date</b> (day/month/year) 24 December 1999 (24.12.99)	<b>Priority date</b> (day/month/year) 24 December 1998 (24.12.98)
<b>Applicant</b> KELSO, Richard, Malcolm et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

21 July 2000 (21.07.00)

☐ in a notice effecting later election filed with the International Bureau on:
2. The election ☒ was
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

<b>The International Bureau of WIPO</b> 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	<b>Authorized officer</b> F. Baechler Telephone No.: (41-22) 338.83.38
--	--

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## PCT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

HENSHAW, Damon  
1 Little Collins Street  
Melbourne, Victoria 3000  
AUSTRALIE

Date of mailing (day/month/year) 06 October 2000 (06.10.00)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference 2244754/LKA	
International application No. PCT/AU99/01164	International filing date (day/month/year) 24 December 1999 (24.12.99)

## 1. The following indications appeared on record concerning:

☒ the applicant      ☒ the inventor      ☐ the agent      ☐ the common representative

Name and Address MOHD GHAZALI, Badrulhisham University of Adelaide Department of Mechanical Engineering Adelaide, South Australia 5005 Australia	State of Nationality MY	State of Residence AU
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	

## 2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☐ the person      ☒ the name      ☐ the address      ☐ the nationality      ☐ the residence

Name and Address BUDRULHISHAM, Moohd, Ghazali University of Adelaide Department of Mechanical Engineering Adelaide, South Australia 5005 Australia	State of Nationality MY	State of Residence AU
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	

## 3. Further observations, if necessary:

## 4. A copy of this notification has been sent to:

<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned
<input type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Margret Fourne-Godbersen
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

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**PATENT COOPERATION TREATY**  
**PCT**  
**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**

REC'D 04 AUG 2000

PCT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>2244754</b>	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).	
International application No. <b>PCT/AU99/01164</b>	International filing date (day/month/year) <b>24 December 1999</b>	Priority Date (day/month/year) <b>24 December 1998</b>
International Patent Classification (IPC) or national classification and IPC  <b>Int. Cl. <sup>7</sup> F23D 14/24, 14/62; B01F 3/00, 5/00</b>		
Applicant <b>LUMINIS PTY LTD et al</b>		

1.	This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2.	This REPORT consists of a total of <b>3</b> sheets, including this cover sheet.  <input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  These annexes consist of a total of <b>    </b> sheet(s).
3.	This report contains indications relating to the following items:  I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application

Date of submission of the demand <b>21 July 2000</b>	Date of completion of the report <b>27 July 2000</b>
Name and mailing address of the IPEA/AU  <b>AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929</b>	Authorized Officer  <b>B. PREMARATNE</b>

**I. Basis of the report**

1. With regard to the elements of the international application:\*
- ☒ the international application as originally filed.
- ☐ the description,        pages , as originally filed,  
   pages , filed with the demand,  
   pages , received on    with the letter of
- ☐ the claims,                pages , as originally filed,  
   pages , as amended (together with any statement) under Article 19,  
   pages , filed with the demand,  
   pages , received on    with the letter of
- ☐ the drawings,            pages , as originally filed,  
   pages , filed with the demand,  
   pages , received on    with the letter of
- ☐ the sequence listing part of the description:  
   pages , as originally filed  
   pages , filed with the demand  
   pages , received on    with the letter of
2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.  
These elements were available or furnished to this Authority in the following language which is:
- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).
3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, was on the basis of the sequence listing:
- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished
4. ☐ The amendments have resulted in the cancellation of:
- ☐ the description,        pages
- ☐ the claims,                Nos.
- ☐ the drawings,            sheets/fig.
5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims 1 - 32	YES
	Claims	NO
Inventive step (IS)	Claims 1 - 32	YES
	Claims	NO
Industrial applicability (IA)	Claims 1 - 32	YES
	Claims	NO

**2. Citations and explanations (Rule 70.7)**

Claims 1-32 meet the criteria set forth in PCT Articles 33(2) - (3) because the prior art published before the priority date does not disclose or fairly suggest a fluid mixing device as claimed in the above claims. The claims also meet the criteria set forth in PCT Article 33(4) because the fluid mixing device is industrially applicable.

**PCT REQUEST**

2244754/LKA

Original (for SUBMISSION) - printed on 24.12.1999 12:08:16 PM

0	For receiving Office use only	
0-1	International Application No.	
0-2	International Filing Date	
0-3	Name of receiving Office and "PCT International Application"	
0-4	Form - PCT/RO/101 PCT Request Prepared using	PCT-EASY Version 2.84 (updated 01.07.1999)
0-5	Petition The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty	
0-6	Receiving Office (specified by the applicant)	Australian Patent Office (RO/AU)
0-7	Applicant's or agent's file reference	2244754/LKA
I	Title of invention	FLUID MIXING DEVICE
II	Applicant	
II-1	This person is:	applicant only
II-2	Applicant for	all designated States except US
II-4	Name	LUMINIS PTY LTD
II-5	Address:	- 1st Floor 10-20 Puteney Street Adelaide, South Australia 5000 Australia
II-6	State of nationality	AU
II-7	State of residence	AU
II-8	Telephone No.	-
II-9	Facsimile No.	-
II-10	e-mail	-
III-1	Applicant and/or inventor	
III-1-1	This person is:	applicant and inventor
III-1-2	Applicant for	US only
III-1-4	Name (LAST, First)	KELSO, Richard, Malcolm
III-1-5	Address:	- 175 Stephen Terrace Walkerville, South Australia 5081 Australia
III-1-6	State of nationality	AU
III-1-7	State of residence	AU

## PCT REQUEST

2244754/LKA

Original (for SUBMISSION) - printed on 24.12.1999 12:08:16 PM

III-2	Applicant and/or inventor	applicant and inventor
III-2-1	This person is:	US only
III-2-2	Applicant for	LANSPEARY, Peter, Vernon
III-2-4	Name (LAST, First)	-
III-2-5	Address:	1 Ozone Court Paradise, South Australia 5075 Australia
III-2-6	State of nationality	AU
III-2-7	State of residence	AU
III-3	Applicant and/or inventor	applicant and inventor
III-3-1	This person is:	US only
III-3-2	Applicant for	NATHAN, Graham, J
III-3-4	Name (LAST, First)	-
III-3-5	Address:	21 Wolseley Road Blackwood, South Australia 5051 Australia
III-3-6	State of nationality	AU
III-3-7	State of residence	AU
III-4	Applicant and/or inventor	applicant and inventor
III-4-1	This person is:	US only
III-4-2	Applicant for	PARHAM, Jordan, James
III-4-4	Name (LAST, First)	-
III-4-5	Address:	4 Moulden Street Norwood, South Australia 5067 Australia
III-4-6	State of nationality	AU
III-4-7	State of residence	AU
III-5	Applicant and/or inventor	applicant only
III-5-1	This person is:	all designated States except US
III-5-2	Applicant for	HILL, Steven, J
III-5-4	Name (LAST, First)	-
III-5-5	Address:	20 Albert Street Prospect, South Australia 5082 Australia
III-5-6	State of nationality	AU
III-5-7	State of residence	AU



**PCT REQUEST**

Original (for SUBMISSION) - printed on 24.12.1999 12:08:16 PM

III-6	<b>Applicant and/or inventor</b>	
III-6-1	This person is:	applicant and inventor
III-6-2	Applicant for	US only
III-6-4	Name (LAST, First)	KELLY, Graham
III-6-5	Address:	- 51 Francis Street North Brighton, South Australia 5048 Australia
III-6-6	State of nationality	AU
III-6-7	State of residence	AU
III-7	<b>Applicant and/or inventor</b>	
III-7-1	This person is:	applicant and inventor
III-7-2	Applicant for	US only
III-7-4	Name (LAST, First)	CUTLER, Philip, Robert, Edward
III-7-5	Address:	- 3/74 Gilbert Street Gilberton, South Australia 5081 Australia
III-7-6	State of nationality	AU
III-7-7	State of residence	AU
III-8	<b>Applicant and/or inventor</b>	
III-8-1	This person is:	applicant and inventor
III-8-2	Applicant for	US only
III-8-4	Name (LAST, First)	MOHD GHAZALI, Budrulhisham
III-8-5	Address:	C/O Department of Mechanical Engineering University of Adelaide Adelaide, South Australia 5005 Australia
III-8-6	State of nationality	MY
III-8-7	State of residence	AU
IV-1	<b>Agent or common representative; or address for correspondence</b> The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:	agent
IV-1-1	Name (LAST, First)	HENSHAW, Damon
IV-1-2	Address:	- 1 Little Collins Street Melbourne, Victoria 3000 Australia
IV-1-3	Telephone No.	+61 3 9254 2777
IV-1-4	Facsimile No.	+61 3 9254 2770
IV-1-5	e-mail	dhenshaw@davies.com.au

## PCT REQUEST

2244754/LKA

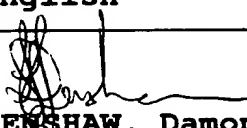
Original (for SUBMISSION) - printed on 24.12.1999 12:08:16 PM

IV-2	Additional agent(s)	agent
IV-2-1	Name (LAST, First)	HIND, Raymond, S
IV-2-2	Address:	1 Little Collins Street Melbourne, Victoria 3000 Australia
IV-2-3	Telephone No.	+61 3 9254 2777
IV-2-4	Facsimile No.	+61 3 9254 2770
IV-3	Additional agent(s)	agent
IV-3-1	Name (LAST, First)	HUNTSMAN, Peter, H
IV-3-2	Address:	1 Little Collins Street Melbourne, Victoria 3000 Australia
IV-3-3	Telephone No.	+61 3 9254 2777
IV-3-4	Facsimile No.	+61 3 9254 2770
V	Designation of States	
V-1	Regional Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	<p>AP: GH GM KE LS MW SD SL SZ UG ZW and any other State which is a Contracting State of the Harare Protocol and of the PCT</p> <p>EA: AM AZ BY KG KZ MD RU TJ TM and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT</p> <p>EP: AT BE CH&amp;LI CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE and any other State which is a Contracting State of the European Patent Convention and of the PCT</p> <p>OA: BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG and any other State which is a member State of OAPI and a Contracting State of the PCT</p>
V-2	National Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	<p>AE AL AM AT AU AZ BA BB BG BR BY CA</p> <p>CH&amp;LI CN CR CU CZ DE DK DM EE ES FI GB</p> <p>GD GE GH GM HR HU ID IL IN IS JP KE KG</p> <p>KP KR KZ LC LK LR LS LT LU LV MD MG MK</p> <p>MN MW MX NO NZ PL PT RO RU SD SE SG SI</p> <p>SK SL TJ TM TR TT TZ UA UG US UZ VN YU</p> <p>ZA ZW</p>

## PCT REQUEST

2244754/LKA

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V-5	<b>Precautionary Designation Statement</b> In addition to the designations made under items V-1, V-2 and V-3, the applicant also makes under Rule 4.9(b) all designations which would be permitted under the PCT except any designation(s) of the State(s) indicated under item V-6 below. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit.		
V-6	<b>Exclusion(s) from precautionary designations</b>	NONE	
VI-1	<b>Priority claim of earlier national application</b>		
VI-1-1	Filing date	24 December 1998 (24.12.1998)	
VI-1-2	Number	PP7936	
VI-1-3	Country	AU	
VI-2	<b>Priority document request</b> The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) identified above as item(s):	VI-1	
VII-1	<b>International Searching Authority Chosen</b>	Australian Patent Office (ISA/AU)	
VIII	<b>Check list</b>	number of sheets	electronic file(s) attached
VIII-1	Request	6	-
VIII-2	Description	12	-
VIII-3	Claims	4	-
VIII-4	Abstract	1	2244754.txt
VIII-5	Drawings	12	-
VIII-7	TOTAL	35	
	<b>Accompanying items</b>	paper document(s) attached	electronic file(s) attached
VIII-8	Fee calculation sheet	✓	-
VIII-16	PCT-EASY diskette	-	diskette
VIII-18	<b>Figure of the drawings which should accompany the abstract</b>	2	
VIII-19	<b>Language of filing of the international application</b>	English	
IX-1	<b>Signature of applicant or agent</b>		
IX-1-1	Name (LAST, First)	HENSHAW, Damon	

## FOR RECEIVING OFFICE USE ONLY

10-1	Date of actual receipt of the purported international application	
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**PCT REQUEST**Original (for **SUBMISSION**) - printed on 24.12.1999 12:08:16 PM

10-2	Drawings:	
10-2-1	R ceived	
10-2-2	Not received	
10-3	Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application	
10-4	Date of timely receipt of the required corrections under PCT Article 11(2)	
10-5	International Searching Authority	<b>ISA/AU</b>
10-6	Transmittal of search copy delayed until search fee is paid	

**FOR INTERNATIONAL BUREAU USE ONLY**

11-1	Date of receipt of the record copy by the International Bureau	
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# PATENT COOPERATION TREATY

From the:  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

SDAY - 1 AUG 2000

To:  
  
DAVIES COLLISON CAVE  
1 Little Collins Street  
MELBOURNE VIC 3000

## PCT NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of mailing  
day/month/year **31 JUL 2000**

Applicant's or agent's file reference  
2244754 *LKA*

### IMPORTANT NOTIFICATION

International application No.  
**PCT/AU99/01164**

International filing date  
24 December 1999

Priority date  
24 December 1998

Applicant  
LUMINIS PTY LTD et al

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translations to those Offices.
4. **REMINDER**  
  
The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).  
  
Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.  
  
For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide

Name and mailing address of the IPEA/AU  
AUSTRALIAN PATENT OFFICE  
PO BOX 200, WODEN ACT 2606, AUSTRALIA  
E-mail address: pct@ipaaustralia.gov.au  
Facsimile No. (02) 6285 3929

Authorized officer

**B. PREMARATNE**

**PATENT COOPERATION TREATY**  
**PCT**  
**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**  
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>2244754</b>	<b>FOR FURTHER ACTION</b>	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).
International application No. <b>PCT/AU99/01164</b>	International filing date ( <i>day/month/year</i> ) <b>24 December 1999</b>	Priority Date ( <i>day/month/year</i> ) <b>24 December 1998</b>
International Patent Classification (IPC) or national classification and IPC  <b>Int. Cl. <sup>7</sup> F23D 14/24, 14/62; B01F 3/00, 5/00</b>		
Applicant <b>LUMINIS PTY LTD et al</b>		

1.	This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.																								
2.	This REPORT consists of a total of <b>3</b> sheets, including this cover sheet.  <input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  These annexes consist of a total of    sheet(s).																								
3. This report contains indications relating to the following items: <table style="width: 100%; margin-top: 10px;"> <tr> <td style="width: 5%;">I</td> <td style="width: 5%; text-align: center;"><input checked="" type="checkbox"/></td> <td>Basis of the report</td> </tr> <tr> <td>II</td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Priority</td> </tr> <tr> <td>III</td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td>IV</td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Lack of unity of invention</td> </tr> <tr> <td>V</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td>VI</td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Certain documents cited</td> </tr> <tr> <td>VII</td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Certain defects in the international application</td> </tr> <tr> <td>VIII</td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Certain observations on the international application</td> </tr> </table>		I	<input checked="" type="checkbox"/>	Basis of the report	II	<input type="checkbox"/>	Priority	III	<input type="checkbox"/>	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	IV	<input type="checkbox"/>	Lack of unity of invention	V	<input checked="" type="checkbox"/>	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	VI	<input type="checkbox"/>	Certain documents cited	VII	<input type="checkbox"/>	Certain defects in the international application	VIII	<input type="checkbox"/>	Certain observations on the international application
I	<input checked="" type="checkbox"/>	Basis of the report																							
II	<input type="checkbox"/>	Priority																							
III	<input type="checkbox"/>	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability																							
IV	<input type="checkbox"/>	Lack of unity of invention																							
V	<input checked="" type="checkbox"/>	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement																							
VI	<input type="checkbox"/>	Certain documents cited																							
VII	<input type="checkbox"/>	Certain defects in the international application																							
VIII	<input type="checkbox"/>	Certain observations on the international application																							

Date of submission of the demand <b>21 July 2000</b>	Date of completion of the report <b>27 July 2000</b>
Name and mailing address of the IPEA/AU  AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer   <b>B. PREMARATNE</b>

**I. Basis of the report****1. With regard to the elements of the international application:\***

- ☒ the international application as originally filed.
- ☐ the description,      pages , as originally filed,  
    pages , filed with the demand,  
    pages , received on      with the letter of
- ☐ the claims,      pages , as originally filed,  
    pages , as amended (together with any statement) under Article 19,  
    pages , filed with the demand,  
    pages , received on      with the letter of
- ☐ the drawings,      pages , as originally filed,  
    pages , filed with the demand,  
    pages , received on      with the letter of
- ☐ the sequence listing part of the description:  
    pages , as originally filed  
    pages , filed with the demand  
    pages , received on      with the letter of

**2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.**

These elements were available or furnished to this Authority in the following language which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

**3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, was on the basis of the sequence listing:**

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

**4. ☐ The amendments have resulted in the cancellation of:**

- ☐ the description,      pages
- ☐ the claims,      Nos.
- ☐ the drawings,      sheets/fig.

**5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\***

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims 1 - 32	YES
	Claims	NO
Inventive step (IS)	Claims 1 - 32	YES
	Claims	NO
Industrial applicability (IA)	Claims 1 - 32	YES
	Claims	NO

**2. Citations and explanations (Rule 70.7)**

Claims 1-32 meet the criteria set forth in PCT Articles 33(2) - (3) because the prior art published before the priority date does not disclose or fairly suggest a fluid mixing device as claimed in the above claims. The claims also meet the criteria set forth in PCT Article 33(4) because the fluid mixing device is industrially applicable.



From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

To: Agent :

DAVIES COLLISON CAVE  
1 Little Collins Street  
MELBOURNE VIC 3000

NOTIFICATION OF RECEIPT  
OF DEMAND BY COMPETENT INTERNATIONAL  
PRELIMINARY EXAMINING AUTHORITY

(PCT Rule 59.3(e) and 61.1(b), first sentence  
and Administrative Instructions, Section 601(a))

Date of mailing 26 JUL 2000  
(day/month/year) (26/7/00)

Applicant's or agent's file reference  
2244754

IMPORTANT NOTIFICATION

International application No.  
PCT/AU99/01164

International filing date (day/month/year)  
24 DEC 1999 (24/12/99)

Priority date (day/month/year)  
24 DEC 1998 (24/12/98)

Applicant

Luminis Pty Ltd (et al.)

1. The applicant is hereby notified that this International Preliminary Examining Authority considers the following date as the date of receipt of the demand for international preliminary examination of the international application:

21 JUL 2000 (21/7/00)

2. That date of receipt is:



the actual date of receipt of the demand by this Authority (Rule 61.1(b)).



the actual date of receipt of the demand on behalf of this Authority (Rule 59.3(e)).



the date on which this Authority has, in response to the Invitation to correct defects in the demand (Form PCT/IPEA/404), received the required corrections.

3. ☐ **Attention:** That date of receipt is **AFTER** the expiration of 19 months from the priority date. Consequently, the elections(s) made in the demand does (do) not have the effect of postponing the entry into the national phase until 30 months from the priority date (or later in some Offices) (Article 39(1)). Therefore, the acts for entry into the national phase must be performed within 20 months from the priority date (or later in some Offices) (Article 22). For details, see the *PCT Applicant's Guide, Volume II*.



(If applicable) This notification confirms the information given by telephone, facsimile transmission or in person on:

4. Only where paragraph 3 applies, a copy of this notification has been sent to the International Bureau.

Name and mailing address of the IPEA/AU  
AUSTRALIAN PATENT OFFICE  
PO BOX 200, WODEN ACT 2606, AUSTRALIA  
E-mail: pct@ipaustalia.gov.au  
Facsimile No. 02 6285 3929

Authorized officer

JOHN COLDWELL  
02 6283 2357

Telephone No.

The demand must be filed directly with the competent International Preliminary Examining Authority or, if two or more Authorities are competent, with the one chosen by the applicant. Full name or two-letter code of that Authority must be indicated by the applicant on the line below:

IPEA/ \_\_\_\_\_

PCT

CHAPTER II

DEMAND

under Article 31 of the Patent Cooperation Treaty:

The undersigned requests that the international application specified below be the subject of international preliminary examination according to the Patent Cooperation Treaty and hereby elects all eligible States (except where otherwise indicated).

For International Preliminary Examining Authority use only	
Identification of IPEA	Date of receipt of DEMAND
<b>Box No. I IDENTIFICATION OF THE INTERNATIONAL APPLICATION</b>	
International application No. PCT/AU99/01164	International filing date (day/month/year) 24 December 1999 (24.12.99)
Applicant's or agent's file reference (Earliest) Priority date (day/month/year) 24 December 1998 (24.12.98)	
Title of invention FLUID MIXING DEVICE	
<b>Box No. II APPLICANT(S)</b>	
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.) LUMINIS PTY LTD 1st Floor 10-20 Pulteney Street Adelaide South Australia 5000 Australia	
Telephone No.:	
Facsimile No.:	
Teleprinter No.:	
State (that is, country) of nationality: Australia	State (that is, country) of residence: Australia
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.) KELSO, Richard, Malcolm 175 Stephen Terrace Walkerville, South Australia 5081 Australia	
State (that is, country) of nationality: Australia	State (that is, country) of residence: Australia
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.) LANSPEARY, Peter, Vernon 1 Ozone Court Paradise, South Australia 5075 Australia	
State (that is, country) of nationality: Australia	State (that is, country) of residence: Australia
<input checked="" type="checkbox"/> Further applicants are indicated on a continuation sheet.	

## Continuation of Box No. II APPLICANT(S)

*If none of the following sub-boxes is used, this sheet should not be included in the demand.*

Name and address: (Family name followed by given name: for a legal entity, full official designation. The address must include postal code and name of country.)

NATHAN, Graham, J  
21 Wolseley Road  
Blackwood, South Australia 5051  
Australia

State (that is, country) of nationality:

Australia

State (that is, country) of residence:

Australia

Name and address: (Family name followed by given name: for a legal entity, full official designation. The address must include postal code and name of country.)

PARHAM, Jordan, James  
4 Moulden Street  
Norwood, South Australia 5067  
Australia

State (that is, country) of nationality:

Australia

State (that is, country) of residence:

Australia

Name and address: (Family name followed by given name: for a legal entity, full official designation. The address must include postal code and name of country.)

HILL, Steven, J  
20 Albert Street  
Prospect, South Australia 5082  
Australia

State (that is, country) of nationality:

Australia

State (that is, country) of residence:

Australia

Name and address: (Family name followed by given name: for a legal entity, full official designation. The address must include postal code and name of country.)

KELLY, Graham  
51 Francis Street  
North Brighton, South Australia 5048  
Australia

State (that is, country) of nationality:

Australia

State (that is, country) of residence:

Australia



Further applicants are indicated on another continuation sheet.

## Continuation of Box No. II APPLICANT(S)

*If none of the following sub-boxes is used, this sheet should not be included in the demand.*

Name and address: (Familyname followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

CUTLER, Philip, Robert, Edward  
3/74 Gilbert Street  
Gilberton, South Australia 5081  
Australia

State (that is, country) of nationality:

Australia

State (that is, country) of residence:

Australia

Name and address: (Familyname followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

MOHD GHAZALI, Badrulhisham  
C/O Department of Mechanical Engineering  
University of Adelaide  
Adelaide, South Australia 5005  
Australia

State (that is, country) of nationality:

Malaysia

State (that is, country) of residence:

Australia

Name and address: (Familyname followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

State (that is, country) of nationality:

State (that is, country) of residence:

Name and address: (Familyname followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

State (that is, country) of nationality:

State (that is, country) of residence:

☐

Further applicants are indicated on another continuation sheet.

**Box No. III AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE**

The following person is ☒ agent ☐ common representative  
 and ☒ has been appointed earlier and represents the applicant(s) also for international preliminary examination.  
☐ is hereby appointed and any earlier appointment of (an) agent(s)/common representative is hereby revoked.  
☐ is hereby appointed, specifically for the procedure before the International Preliminary Examining Authority, in addition to the agent(s)/common representative appointed earlier.

Name and address: *(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)*

HENSHAW, Damon 1 Little Collins Street  
 HIND, Raymond, S Melbourne Victoria 3000  
 HUNTSMAN, Peter, H Australia

Telephone No.:

+613 9254 2777

Facsimile No.:

+613 9254 2770

Teleprinter No.:

☐ Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

**Box No. IV BASIS FOR INTERNATIONAL PRELIMINARY EXAMINATION****Statement concerning amendments:\***

1. The applicant wishes the international preliminary examination to start on the basis of:

☒ the international application as originally filed  
 the description ☒ as originally filed  
☐ as amended under Article 34

the claims ☒ as originally filed  
☐ as amended under Article 19 (together with any accompanying statement)  
☐ as amended under Article 34

the drawings ☒ as originally filed  
☐ as amended under Article 34

2. ☐ The applicant wishes any amendment to the claims under Article 19 to be considered as reversed.

3. ☐ The applicant wishes the start of the international preliminary examination to be postponed until the expiration of 20 months from the priority date unless the International Preliminary Examining Authority receives a copy of any amendments made under Article 19 or a notice from the applicant that he does not wish to make such amendments (Rule 69.1(d)). *(This check-box may be marked only where the time limit under Article 19 has not yet expired.)*

\* Where no check-box is marked, international preliminary examination will start on the basis of the international application as originally filed or, where a copy of amendments to the claims under Article 19 and/or amendments of the international application under Article 34 are received by the International Preliminary Examining Authority before it has begun to draw up a written opinion or the international preliminary examination report, as so amended.

Language for the purposes of international preliminary examination: .....English.....

- ☒ which is the language in which the international application was filed.  
☐ which is the language of a translation furnished for the purposes of international search.  
☐ which is the language of publication of the international application.  
☐ which is the language of the translation (to be) furnished for the purposes of international preliminary examination.

**Box No. V ELECTION OF STATES**

The applicant hereby elects all eligible States *(that is, all States which have been designated and which are bound by Chapter II of the PCT)*

excluding the following States which the applicant wishes not to elect:

**Box No. VI CHECK LIST**

The demand is accompanied by the following elements, in the language referred to in Box No. IV, for the purposes of international preliminary examination:

- |  |   |        |
|--|---|--------|
| 1. translation of international application                              | : | sheets |
| 2. amendments under Article 34   | : | sheets |
| 3. copy (or, where required, translation) of amendments under Article 19 | : | sheets |
| 4. copy (or, where required, translation) of statement under Article 19  | : | sheets |
| 5. letter  | : | sheets |
| 6. other (specify)   | : | sheets |

**For International Preliminary Examining Authority use only**

received	not received
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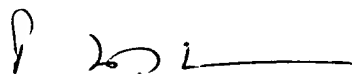
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

The demand is also accompanied by the item(s) marked below:

- |  |   |
|--|---|
| 1. <input type="checkbox"/> fee calculation sheet  | 4. <input type="checkbox"/> statement explaining lack of signature                                  |
| 2. <input type="checkbox"/> separate signed power of attorney                            | 5. <input type="checkbox"/> nucleotide and or amino acid sequence listing in computer readable form |
| 3. <input type="checkbox"/> copy of general power of attorney; reference number, if any: | 6. <input type="checkbox"/> other (specify):  |

**Box No. VII SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE**

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the demand).



HUNTSMAN, Peter, H  
For and on behalf of the Applicant

**For International Preliminary Examining Authority use only**

1. Date of actual receipt of DEMAND:

2. Adjusted date of receipt of demand due to CORRECTIONS under Rule 60.1(b):

3. ☐ The date of receipt of the demand is AFTER the expiration of 19 months from the priority date and item 4 or 5, below, does not apply.

☐ The applicant has been informed accordingly.

4. ☐ The date of receipt of the demand is WITHIN the period of 19 months from the priority date as extended by virtue of Rule 80.5.

5. ☐ Although the date of receipt of the demand is after the expiration of 19 months from the priority date, the delay in arrival is EXCUSED pursuant to Rule 82.

**For International Bureau use only**

Demand received from IPEA on:

# PCT

PCT

## NOTIFICATION OF THE RECORDING OF A CHANGE

(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

T :

WEDNESDAY, 3 MAY 2000

HENSHAW, Damon  
1 Little Collins Street  
Melbourne, Victoria 3000  
AUSTRALIE

Date of mailing (day/month/year) 19 April 2000 (19.04.00)	<p><b>IMPORTANT NOTIFICATION</b></p> <p>International filing date (day/month/year) 24 December 1999 (24.12.99)</p>
Applicant's or agent's file reference 2244754/LKA	
International application No. PCT/AU99/01164	

1. The following indications appeared on record concerning:

☒ the applicant ☐ the inventor ☐ the agent ☐ the common representative

Name and Address

LUMINIS PTY. LTD.  
1st Floor  
10-20 Putney Street  
Adelaide, South Australia 5000  
Australia

State of Nationality

AU

State of Residence

AU

Telephone No.

-

Facsimile No.

-

Teleprinter No.

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☐ the person ☐ the name ☒ the address ☐ the nationality ☐ the residence

Name and Address

LUMINIS PTY. LTD.  
1st Floor  
10-20 Pulteney Street  
Adelaide, South Australia 5000  
Australia

State of Nationality

AU

State of Residence

AU

Telephone No.

-

Facsimile No.

-

Teleprinter No.

3. Further observations, if necessary:

4. A copy of this notification has been sent to:

☒ the receiving Office ☐ the designated Offices concerned  
☐ the International Searching Authority ☐ the elected Offices concerned  
☐ the International Preliminary Examining Authority ☐ other:

<p>The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No.: (41-22) 740.14.35</p>	<p>Authorized officer</p> <p>Sean Taylor</p> <p>Telephone No.: (41-22) 338.83.38</p>
--	--

## PATENT COOPERATION TREATY

PCT

From the INTERNATIONAL BUREAU

To:

HENSHAW, Damon  
1 Little Collins Street  
Melbourne, Victoria 3000  
AUSTRALIE

NOTIFICATION OF THE RECORDING  
OF A CHANGE

(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

<b>Date of mailing</b> (day/month/year) 06 October 2000 (06.10.00)	<b>IMPORTANT NOTIFICATION</b>
<b>Applicant's or agent's file reference</b> 2244754/LKA	
<b>International application No.</b> PCT/AU99/01164	<b>International filing date</b> (day/month/year) 24 December 1999 (24.12.99)

## 1. The following indications appeared on record concerning:

☒ the applicant ☒ the inventor ☐ the agent ☐ the common representative

<b>Name and Address</b> MOHD GHAZALI, Badrulhisham University of Adelaide Department of Mechanical Engineering Adelaide, South Australia 5005 Australia	<b>State of Nationality</b> MY	<b>State of Residence</b> AU
	<b>Telephone No.</b>	
	<b>Facsimile No.</b>	
	<b>Teleprinter No.</b>	

## 2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☐ the person ☒ the name ☐ the address ☐ the nationality ☐ the residence

<b>Name and Address</b> BUDRULHISHAM, Moohd, Ghazali University of Adelaide Department of Mechanical Engineering Adelaide, South Australia 5005 Australia	<b>State of Nationality</b> MY	<b>State of Residence</b> AU
	<b>Telephone No.</b>	
	<b>Facsimile No.</b>	
	<b>Teleprinter No.</b>	

## 3. Further observations, if necessary:

## 4. A copy of this notification has been sent to:

☒ the receiving Office ☐ the designated Offices concerned  
☐ the International Searching Authority ☒ the elected Offices concerned  
☐ the International Preliminary Examining Authority ☐ other:

<b>The International Bureau of WIPO</b> 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	<b>Authorized officer</b> Margret Fourné-Godbersen Telephone No.: (41-22) 338.83.38
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## PCT COOPERATION TREATY

PCT

NOTICE INFORMING THE APPLICANT OF THE  
COMMUNICATION OF THE INTERNATIONAL  
APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

From the INTERNATIONAL BUREAU

To:

HENSHAW, Damon  
1 Little Collins Street  
Melbourne, Victoria 3000  
AUSTRALIE

THURSDAY, 20 JUL 2000

Date of mailing (day/month/year) 06 July 2000 (06.07.00)		IMPORTANT NOTICE	
Applicant's or agent's file reference 2244754/LKA			
International application No. PCT/AU99/01164	International filing date (day/month/year) 24 December 1999 (24.12.99)	Priority date (day/month/year) 24 December 1998 (24.12.98)	
Applicant LUMINIS PTY. LTD. et al			

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice:  
AU,CN,JP,KP,KR,US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:  
AE,AL,AM,AP,AT,AZ,BA,BB,BG,BR,BY,CA,CH,CR,CU,CZ,DE,DK,DM,EA,EE,EP,ES,FI,GB,GD,GE,  
GH,GM,HR,HU,ID,IL,IN,IS,KE,KG,KZ,LC,LK,LR,LS,LT,LU,LV,MA,MD,MG,MK,MN,MW,MX,NO,NZ,  
OA,PL,PT,RO,RU,SD,SE,SG,SI,SK,SL,TJ,TM,TR,TT,TZ,UA,UG,UZ,VN,YU,ZA,ZW  
The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).
3. Enclosed with this Notice is a copy of the international application as published by the International Bureau on  
06 July 2000 (06.07.00) under No. WO 00/39504

**REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)**

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

**REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))**

If the applicant wishes to proceed with the international application in the national phase, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. (41-22) 740.14.35	Authorized officer J. Zahra Telephone No. (41-22) 338.83.38
--	---